



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,528	03/10/2004	William George Ecklund	Vaughn.J-02	7238

22197 7590 01/10/2005

GENE SCOTT; PATENT LAW & VENTURE GROUP  
3140 RED HILL AVENUE  
SUITE 150  
COSTA MESA, CA 92626-3440

EXAMINER

BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
----------	--------------

3617

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/798,528	Applicant(s) ECKLUND, WILLIAM GEORGE	
	Examiner Sherman D. Basinger	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-20 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/1/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: figure 4 does not have any reference numerals-thus, 66 of page 13, line 10 and all of the reference numerals on pages 14 and 15 which are indicated as being in figure 4 are not in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. In line 7 of page 2, "60/232,027" does not appear to be the correct serial number.
3. On page 13, line 10 "64" in both instances should be corrected to -62-. The yoke is pointed out by reference numeral 62.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, 5, 7, 8, 9, 11, 16, 17, 18 and 20 are rejected under 35

U.S.C. 102(b) as being anticipated by Hill.

The support frame is 72, 73, 74, 75, and 40. The articulated arm is shown in figure 13. Note hydraulic cylinders 103, 104 and 105. Note brush heads 94. The standoff arms are 26 and 27. The carrier is boat 20. As shown in figure 5, the frame is enabled for rotation with respect to the boat. Note sensor 95. Note yoke 90, drum 93 and means 91 for driving the yoke.

Hill does disclose by the use of his apparatus the method of claims 16, 17, 18 and 20.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill in view of Browne.

Arms 26 and 27 of Hill do not have rollers as defined in claim 3; however, note rollers 25 of Browne. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide rollers similar to 25 of Browne to the arms 26 and 27 of Hill. Motivation to do so is to protect

the hull being cleaned. Rollers would allow the arms to move up and down the hull being cleaned without marking it.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill in view of Branch.

Hill does not disclose the counterweight as claimed. Note counterweight 28 of Branch. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide a counterweight similar to 28 of Branch to Hill to counterbalance a weight and a movement of the articulated arm so as to stabilize the frame. Motivation to do so is to aid the movement of the frame and articulated arms when it is moving as is shown in figure 5 of Hill.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill. The articulate arms of figure 13 of Hill are not disclosed as being of a length of at least three feet; however, to make them as such would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Motivation to do so is to enable them to position the brushes for effective cleaning of a hull of a boat or ship.

10. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill in view of Temple.

Hill does not disclose yoke 90 with two parallel brush drums in parallel spaced apart arrangement. Note the drums for brushes 46 in Temple. These drums are in parallel spaced apart arrangement. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to

provide to yoke 90 of Hill two drums in parallel spaced apart arrangement in view of the two drums of Temple. Motivation to do so is to better clean the hull being cleaned. Hydraulic cylinder 105 is the means to dynamically move the yoke as claimed in claim 13.

11. Claims 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill in view of Bridwell.

Hill does not disclose at least one nozzle mounted on the brush head assembly and positioned so as to selectively direct a pressure spray toward the ship hull substantially adjacent to the brush head assembly. Note in Bridwell et al column 3, lines 10-16. In view of this teaching it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide at least one nozzle mounted on the brush head assembly and positioned so as to selectively direct a pressure spray toward the ship hull substantially adjacent to the brush head assembly. Motivation to do so is to aid the cleaning of the hull by the brushes or to wash away from the hull material cleaned by the brushes.

***Allowable Subject Matter***

12. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: Claim 14 is indicated as containing allowable subject matter because none of

the art of record provide a fair teaching to modify Hill to have the yoke configured with opposing foot plates that are substantially triangular in shape, the yoke being mounted on the free end of the articulated arm so as to pivot substantially about the centers of the respective foot plates; and three brush drums are mounted within the yoke between the foot plates substantially, at respective corners of the foot plates and in a substantially parallel, spaced-apart arrangement, the yoke being freely pivotable such that two of the three brush drums are substantially in contact with the ship hull during cleaning.

### ***Conclusion***


14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Doty is cited to show brushes 59a and 59b. Fike is cited to show 31 and 32.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 703-308-1139. The examiner can normally be reached on M-F (6:00-2:30 ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sherman D. Basinger  
Primary Examiner  
Art Unit 3617  
1/6/05

sdb